



Dear Tree

Turn the invisible into visible, and visible into impact

GROUP 3

Understanding Brief

Exploring how design can strengthen relationships between people and urban trees **in Glasgow**, building on the **Every Tree Tells a Story (ETTS)** project.



Project Overview

Step 1

Exploring on the Two Core Questions

Question 1

When we observe a tree, do we only focus on the visible part?

Question 2

How can people spontaneously approach, observe, and understand trees?



Step 2

Responding to Our Core Questions

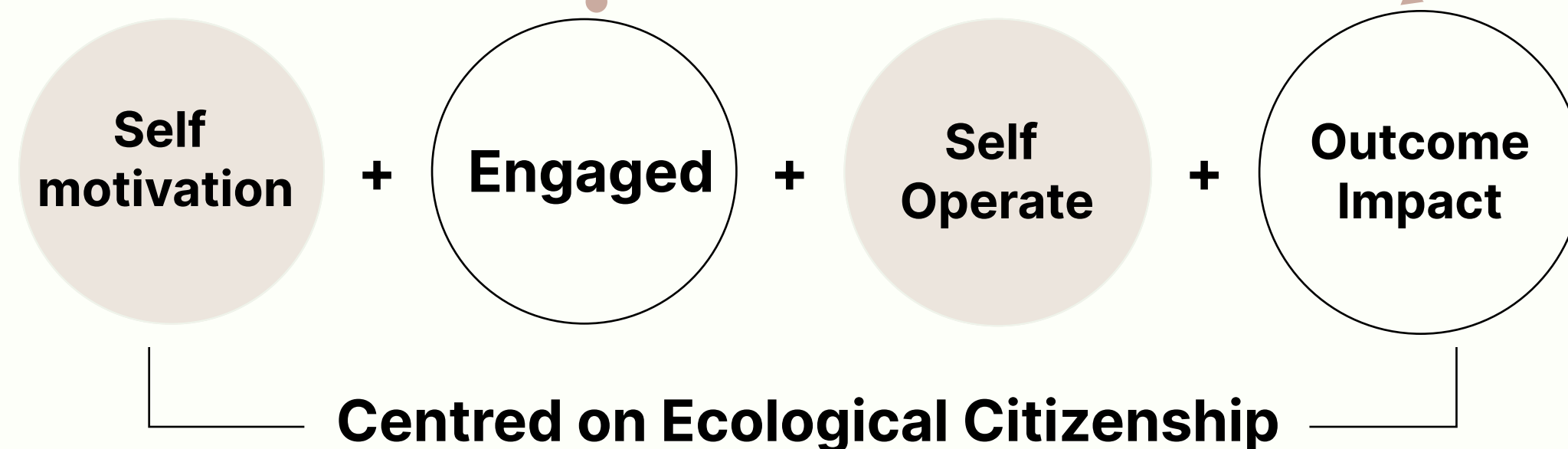
Trees' Invisible Parts

Uncovering Untold Narratives & Overlooked Opportunities

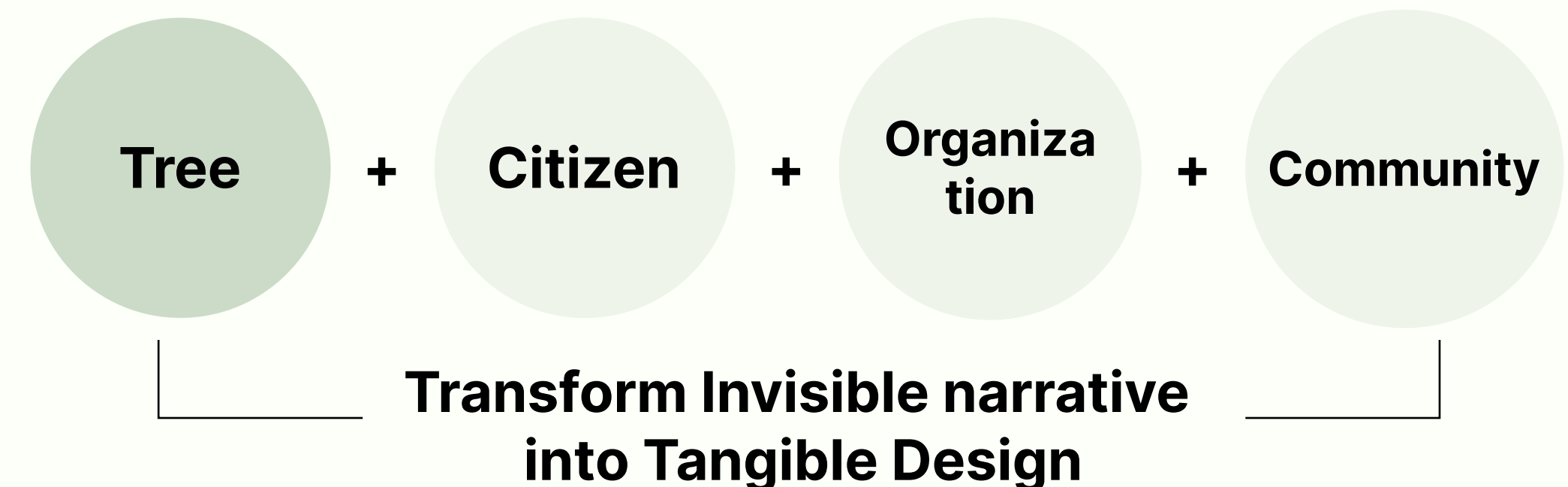
People's Self Motivation

Empower autonomy, strengthen engagement, and build appreciation for the natural world.

What Our Design Should Be



Design Aims



Case Studies

Key case studies that have a strong influence on our research and design thinking.



How Green is My School

Sustainability education works best when children live it, not learn it—but through daily school routines, real environments, and participatory experience.

TAKEAWAY

Effective eco-citizenship education lives in daily life, not in classrooms.



Every Tree Tells a Story

Every Tree Tells a Story gathers and shares tree-related stories from Glasgow residents. These stories inform urban policy, support school and university education, and enrich theoretical research. They also reflect Glaswegians' deep affection for local trees.

TAKEAWAY

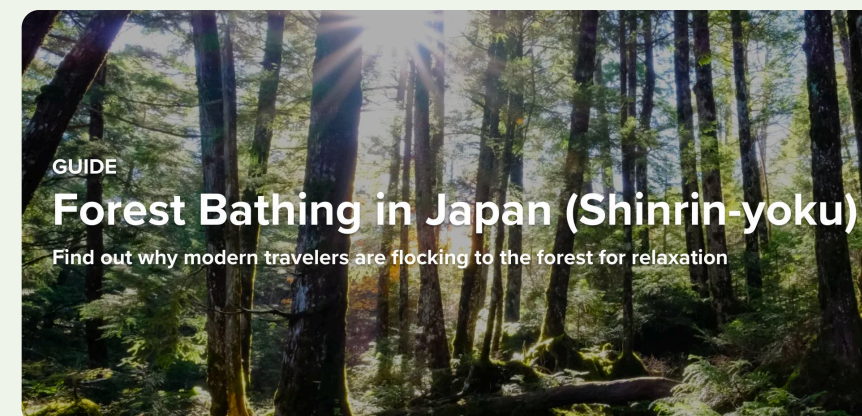
Emphasis on the **narrative and emotions** between people and trees.



Designing a park - IDEO



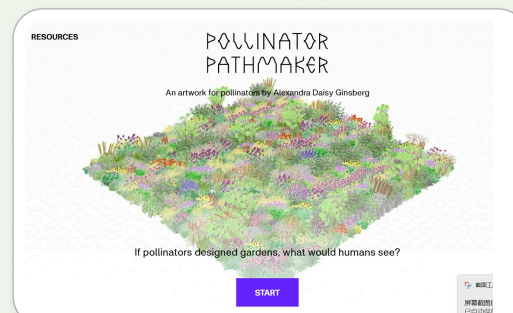
Tree Listening



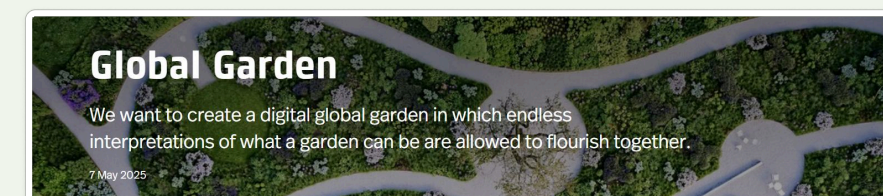
Forest Bathing in Japan



Sounding Line



Pollinator Pathmaker



Global Garden

KEY INSIGHTS

We identified dimensions:

VISIBILITY

Make invisible ecological values visible

EMOTIONAL ENGAGEMENT

Build emotional connection through storytelling

DESIGN DIRECTION

1. Make invisible ecological values visible

2. Create emotional connection through storytelling

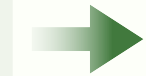
3. Move from data to experience

How the Desk Research Informed Our Design

Q1: When we observe a tree, do we only focus on the visible part?

What We Learned

1. Trees bring invisible emotional, relational, and spatial well-being
2. Trees have invisible layers like sounds and bark texture
3. Trees support insect and ecosystems beneath the surface



How It Sparked Our Ideation

1. We may design multi-sensory experiences (listening, touching)
2. **We should reveal these invisible wealth. Reveal invisible ecological roles like roots, decay, and biodiversity**

What We Should Avoid

1. We should avoid only looking at leaves, trunk, and shade
2. **We should avoid treating trees as only static visual objects, ignoring underground and life cycle processes**



How It Informed Our Design

1. Include sound, touch, and ecological function as core elements
2. Reveal tree sounds, bark feel, and eco relationships, show decomposition, root systems, and pollination as part of tree observation

Q2: How can people spontaneously approach, observe, and understand trees?

What We Learned

1. Feeling and touching trees creates natural emotional bonds
2. Education works via daily life, not extra lessons.
3. **Participation > passive teaching.**
4. Pen and paper spark emotion with specific trees.



How It Sparked Our Ideation

1. Hands-on interactions without instructions
2. **Focus on one nearby tree, not abstract urban forest data.**

What We Should Avoid

1. We should not miss the tactile ritual, and inclusive power of physical touch points
2. Letting people's contributions (stories, data) become invisible, lack of feedback, engagement will quickly fade.
3. Preachy, lecture-style design not going to work



How It Informed Our Design

1. **We create feedback loops, so contributions are seen and valued.**
2. **We design daily small actions (Learn > Do > Feel), not boring lessons.**

Field Research

With Our Questions in Mind

Question 1

When we observe a tree, do we only focus on the visible part?

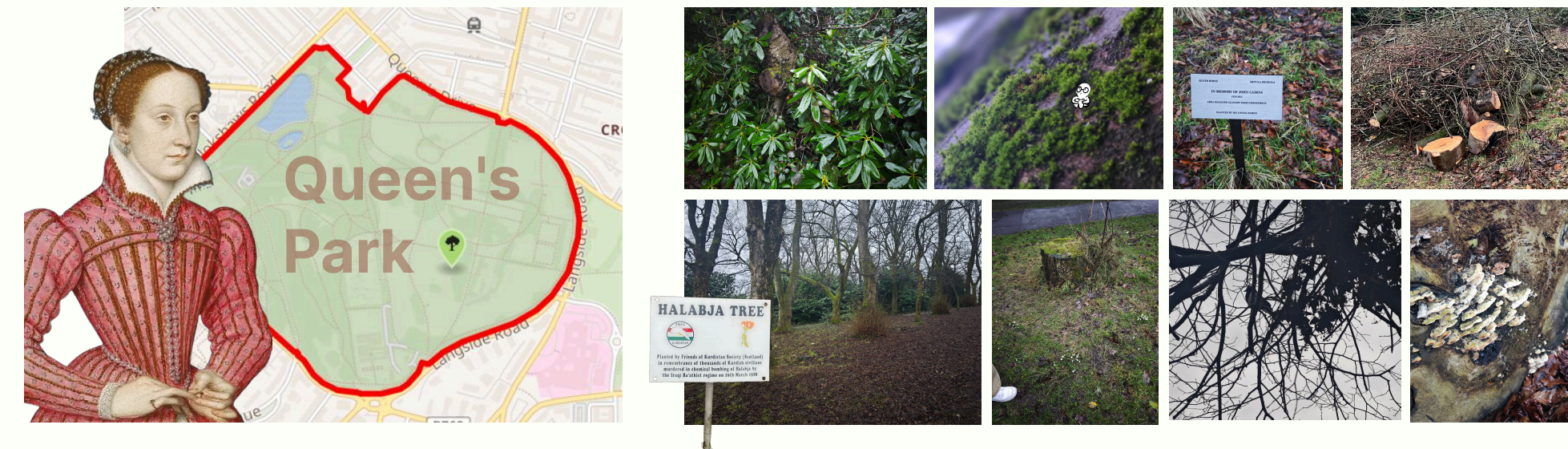
Question 2

How can people spontaneously approach, observe, and understand trees?

Research Methods

Our field research methods include non-participant observation, photography

We Started the Fieldwork



📍 Sauchiehall Street

Street

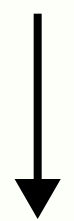
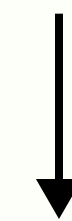
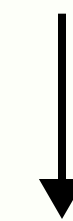
📍 Botanic Garden

Garden

📍 Queen's Park

Public

🚧 **Glasgow**



Why We Chose These Different Kinds of Sites

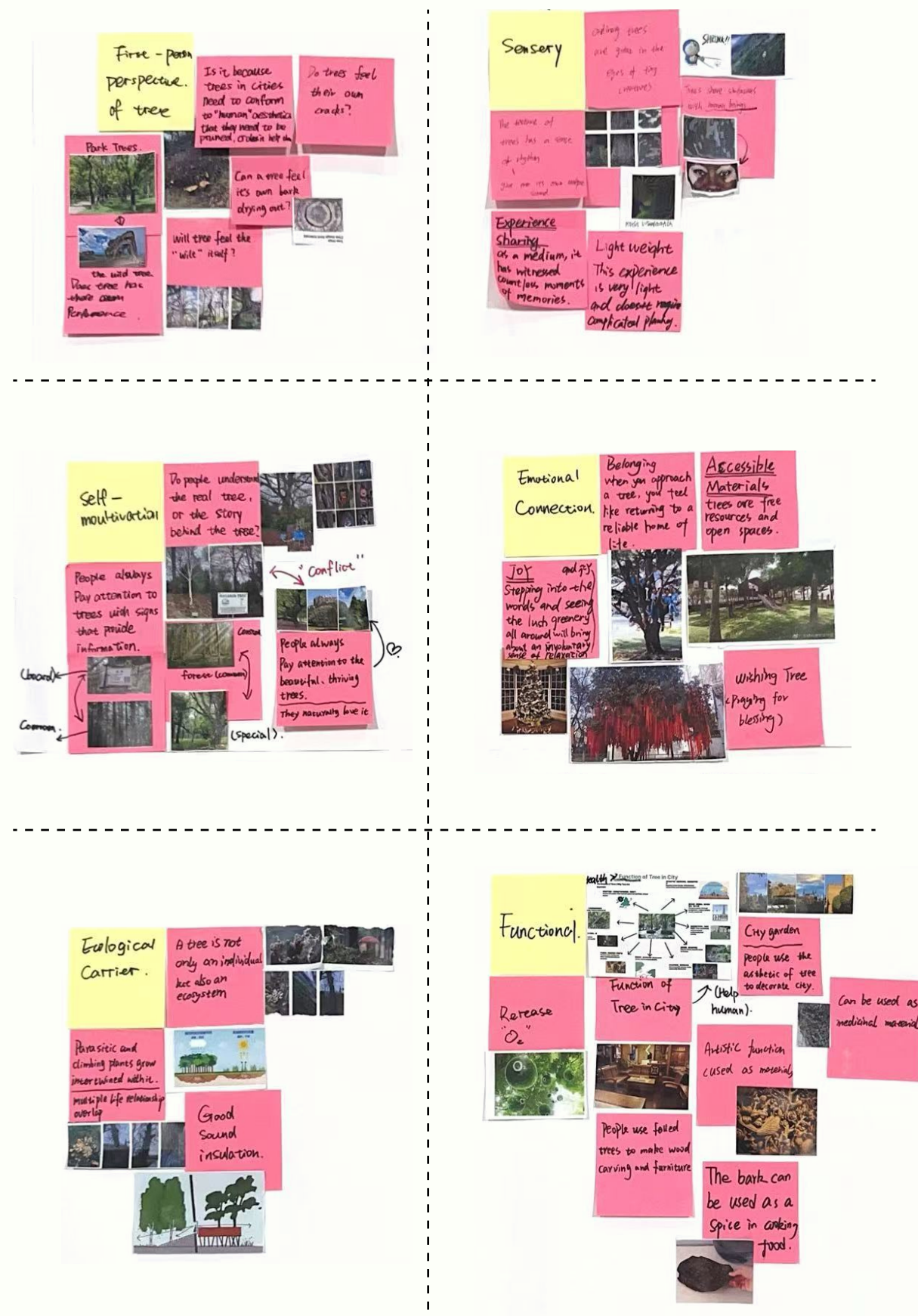
Different types enable us to make more comprehensive observations.

Queen's Park is known for its healthy ecosystem and memorial trees;
Botanic Garden for its rich collection;
Sauchiehall Street for its typical urban trees.

From Data to Direction : Synthesizing Our Focus

Step 1

What We Observed



Step 2

Affinity Diagram

1. First-person-perspective of tree

Can the trees sense their own cracks ?
Can a tree feel it's own bark dying out?
Will tree feel the wilt itself?
Trees in the city follow human's planning
Do trees have their own preferences?

2. Self-motivation

Do people really understand trees & the stories?
Always pay more attention to trees with signs.
People prefer beautiful, thriving trees.
People have a preference for special trees
Approach the tree out of curiosity

3. Ecological Carrier

Not only individuals but also ecosystems
Fungi grow when trees decay
Parasitic plants and climbing plants grow on trees
Provide food chain/food web support
Species Habitat

4. Sensory

The trees have a unique texture
Animals perceive trees differently than humans.
Humans can perceive trees with five senses.
Tree-environment interaction is also perceivable
Spatial sense of security

5. Emotional Connection

A tree is an open space.
Trees can bring a sense of belonging.
Trees can make people relax.
People make wishes through trees
Trees carry religious emotions

6. Functional

Trees decorate the city.
Release oxygen.
Can be used as a leisure spot.
Provide food fruits.
Trees can be used for medicine.

Step 3

Thematic

Tree Identity

Life Cycle

Tree Talks

Tree as a Connection Trigger

Theme 1: Tree Identity

1. Value Framework

We started from the 4 capitals that represent the value of trees.



S. Dodd et al., "Every tree tells a story: The treescape and citizen wellbeing, Ecological Frontiers, 46(2), 2026, p. 640

2. Value Framework

We translated these values into 4 types of tree identity.

Biological Identity

The natural and ecological characteristics of the tree.

Narrative Identity

The stories and meanings associated with the tree.

Social Identity

The relationships between the tree and the community.

Ecological Citizenship Identity

The role of the tree in supporting sustainability and future well-being.

3. Experiment

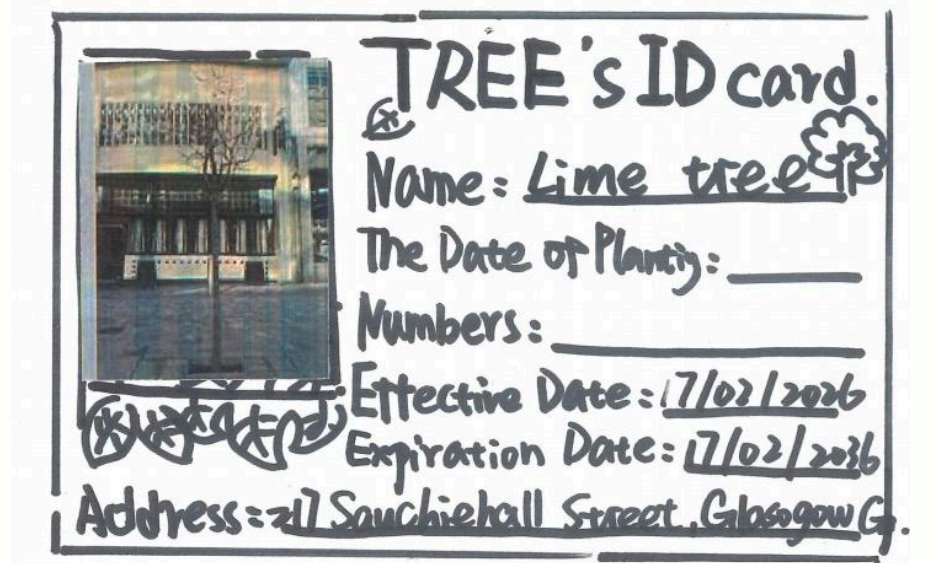
We converted the identities into a Tree ID Card.

Makes invisible values visible.

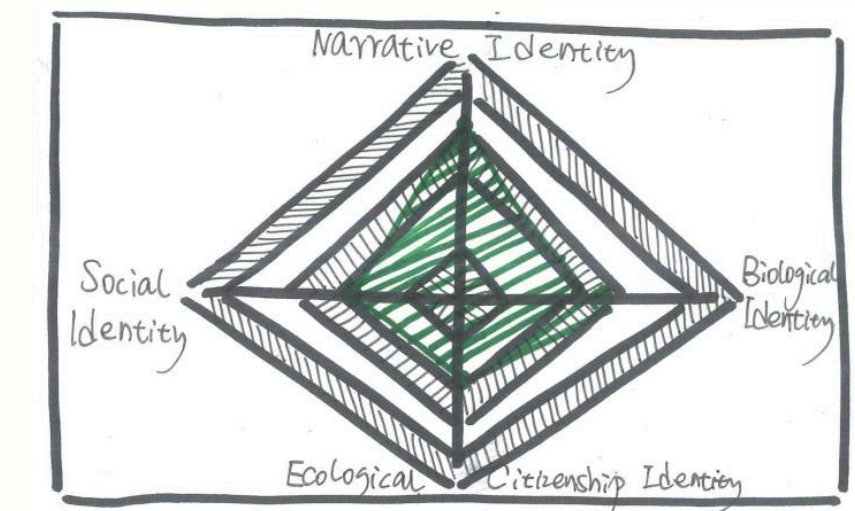
Differences between quantization trees

Gives each tree a identity.

TREE ID CARD



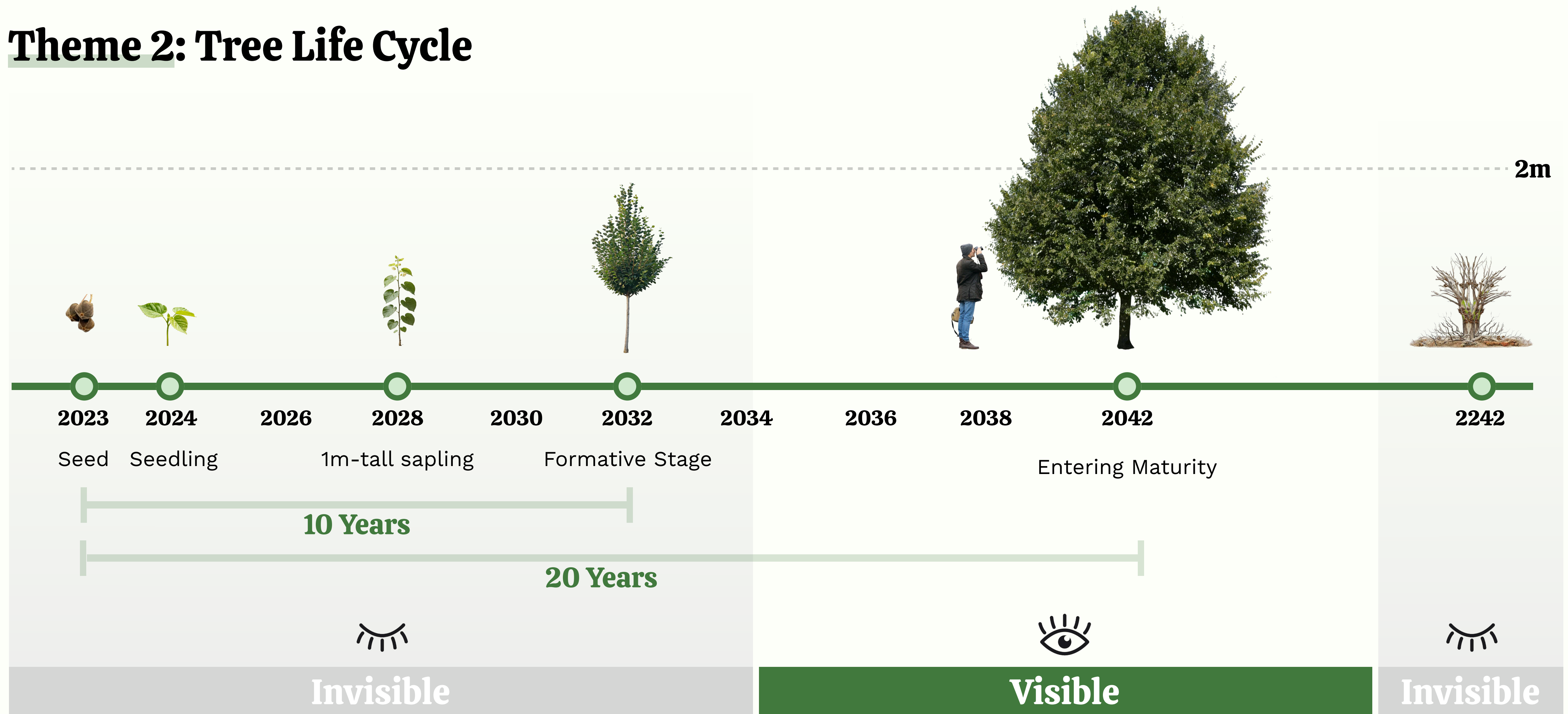
Identity Profile



Insight

By combining a value framework with identity translation, the Tree ID Card helps people understand, compare, and connect with trees in a meaningful and consistent way.

Theme 2: Tree Life Cycle



Insight

We witness its majestic shade, But miss the long journey it made.

It takes a generation to get from there to here. What sustains it's farmers' patience and power from nature.

How the Field Research Informed Our Design

Q1: When we observe a tree, do we only focus on the visible part?

What We Learned

1. Beautiful, ancient and healthy trees attract attention and protection; Trees that are ugly, scarred, crooked, covered with moss and fungi, or have rotten roots are ignored or marked for removal.
2. From a human perspective, it is decay. But from the perspective of other species, a rotten tree is a paradise, a home.
3. The rings, aging, decay and rebirth of trees are metaphors for human life.

How It Sparked Our Ideation

1. **Let the "ugly tree" and the "nameless tree" also be seen - their scars, storms and survival stories are equally valuable.**
2. **We need to make the invisible ecological value visible**
3. Encourage people to observe the beauty and value of trees at different stages, and establish a connection between the life cycle of trees and human beings

What We Should Avoid

1. **Avoid using human aesthetic standards to decide which trees are "worth seeing."**

How It Informed Our Design

1. We need to challenge and expand the value definition of the "beauty" of trees.

Q2: How can people spontaneously approach, observe, and understand trees?

What We Learned

1. People always pay more attention to trees with signs, while those without are ignored. People prefer beautiful, thriving trees.
2. **People approach trees spontaneously out of curiosity, emotion, or functional needs (for leisure, food, or shade), rather than due to education**

How It Sparked Our Ideation

1. **Drop the preachy design. Instead, use simple, accessible daily interactions to stir real feelings and fuel self-motivation.**

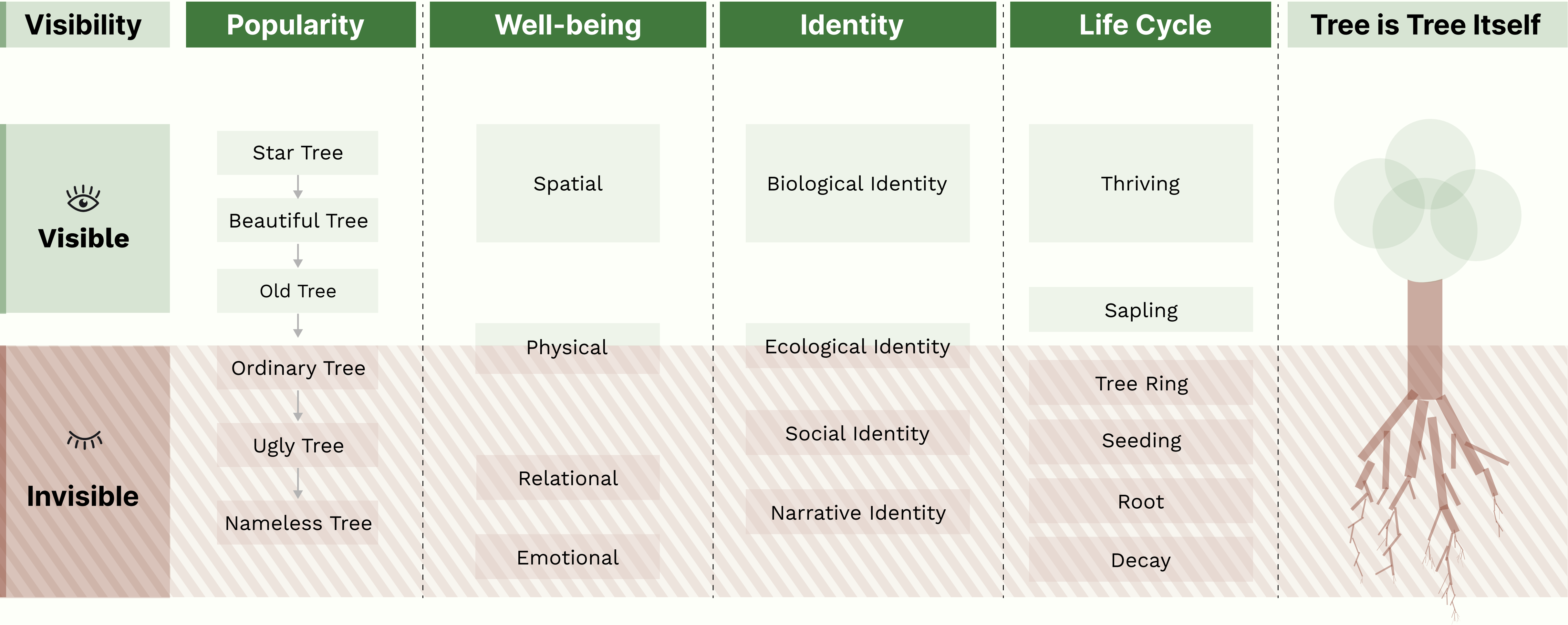
What We Should Avoid

1. **We should avoid assuming that people can only understand trees through vision or knowledge.**

How It Informed Our Design

1. Designing a five-sense experience (observing the four seasons, touching textures, and listening to sounds), understanding trees can start from the body.

Key Insights – visible/invisible model



Stakeholder Interviews

What We Asked	Who are they	Knowledge Shared		
- Views on the visible and invisible model - Understand-ing of tree identity and life cycle - How to strengthen the connection between trees and people	 Every Tree Tells a Story Sarah Dodd & Juliette Wilson University of Strathclyde Prof. Sarah / Dr. Juliette	Respect and equality - Thinking of neighbour trees as quiet everyday entrepreneurs - Recognizing the idea of making tree labour visible		
	 John Thorne GSA Sustainability Coordinator	Community empower	Emotional connection	Sustainable Connection
	 Rob Wilson University of St Andrews Professor	Objective barriers - Trees perceive things on a different scale than humans. - Some data about trees cannot be directly perceived.		
	 Woodland Trust: Anna Perks Tree Equity Lead	Rational Indicators Use ecological indicators to understand the value of trees		
	 Glasgow Tree Lovers' Society: John Butterworth Hon Secretary	Emotional Memory Value local trees and memories		

How the Stakeholder Interviews Informed Our Design

Q1: When we observe a tree, do we only focus on the visible part?

What We Learned

- 1. Trees hold most of their true value in invisible dimensions, on a time scale far beyond human perception.**
2. Focusing only on the visible leads to selective attention favouring "beautiful" trees over ordinary trees creating tree inequality.

How It Sparked Our Ideation

- 1. To make trees' invisible values and stories perceivable to the public.**

What We Should Avoid

1. Focusing only on iconic or "beautiful" trees, ignoring ordinary street trees.
2. Relying only on cold scientific data without emotional connection to the public.

How It Informed Our Design

- 1. Adopt an equal perspective to represent all trees, not just visually appealing ones**

Q2: How can people spontaneously approach, observe, and understand trees?

What We Learned

1. People connect with trees through community action, emotional memory, and relatable stories.
2. The invisible parts of a tree, as well as its value, deserve equal respect.

How It Sparked Our Ideation

1. Design low-threshold action entry points to encourage every day participation and self-motivation.
- 2. To provide people with the opportunity to create unique narratives with trees**

What We Should Avoid

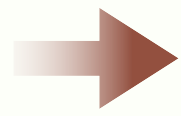
1. Focuses too much on trees and neglects the interaction between people and trees

How It Informed Our Design

- 1. Design experiences that integrate people and trees, stories and actions, sensing and reflection.**

Iteration

These six prototype are derived from our prior insights:



Invisible Value

Self-motivation

Daily Life Integration

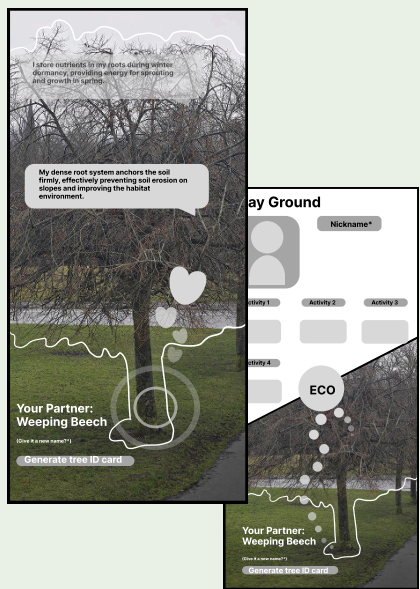
Tree Game



- Self- motivation
- Reward
- Gamified observation loop

A

Digital Platform



- ID card, Map
- Postcard sharing
- Make invisible value tangible

B

Tree workshop



- Hands-on
- Embodied Learning
- Touch
- Sound
- Co-creation

C

Role Play Activity



- First-person tree perspective
- Empathy
- Life cycle

D

Tree Sign



- Warm narrative placard
- Ordinary trees seen anew

E

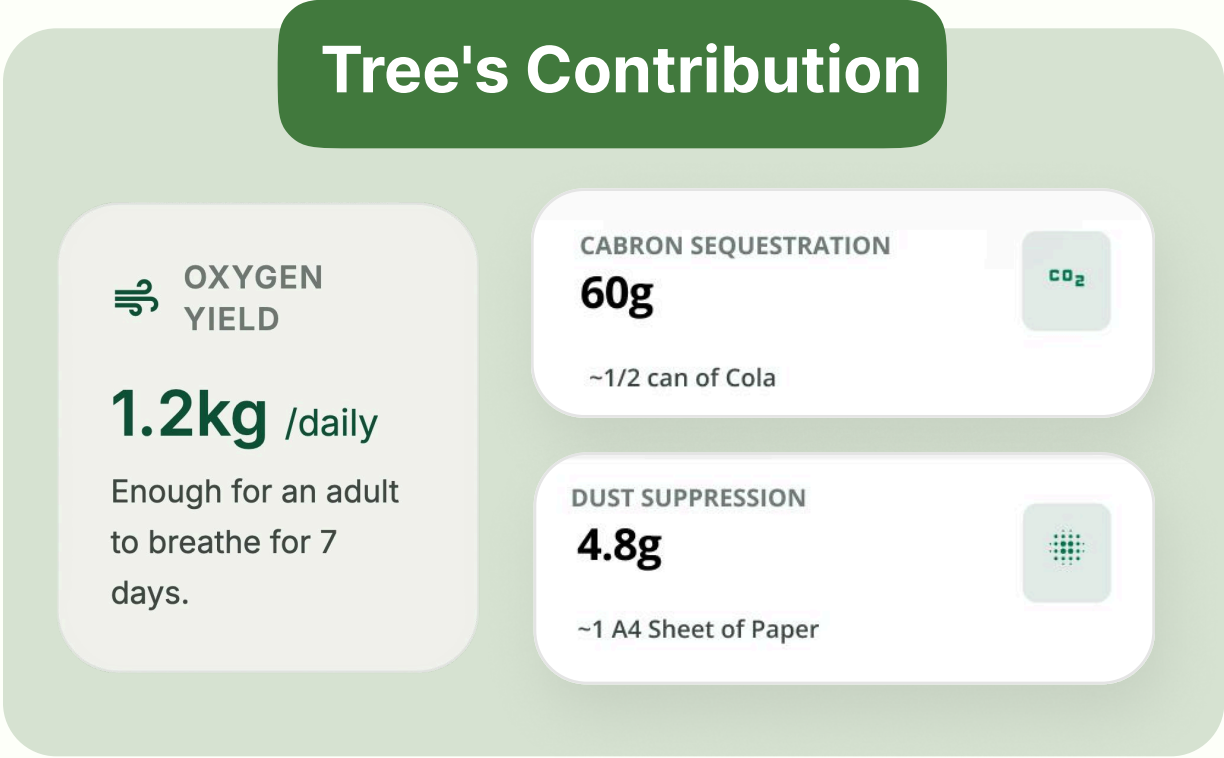
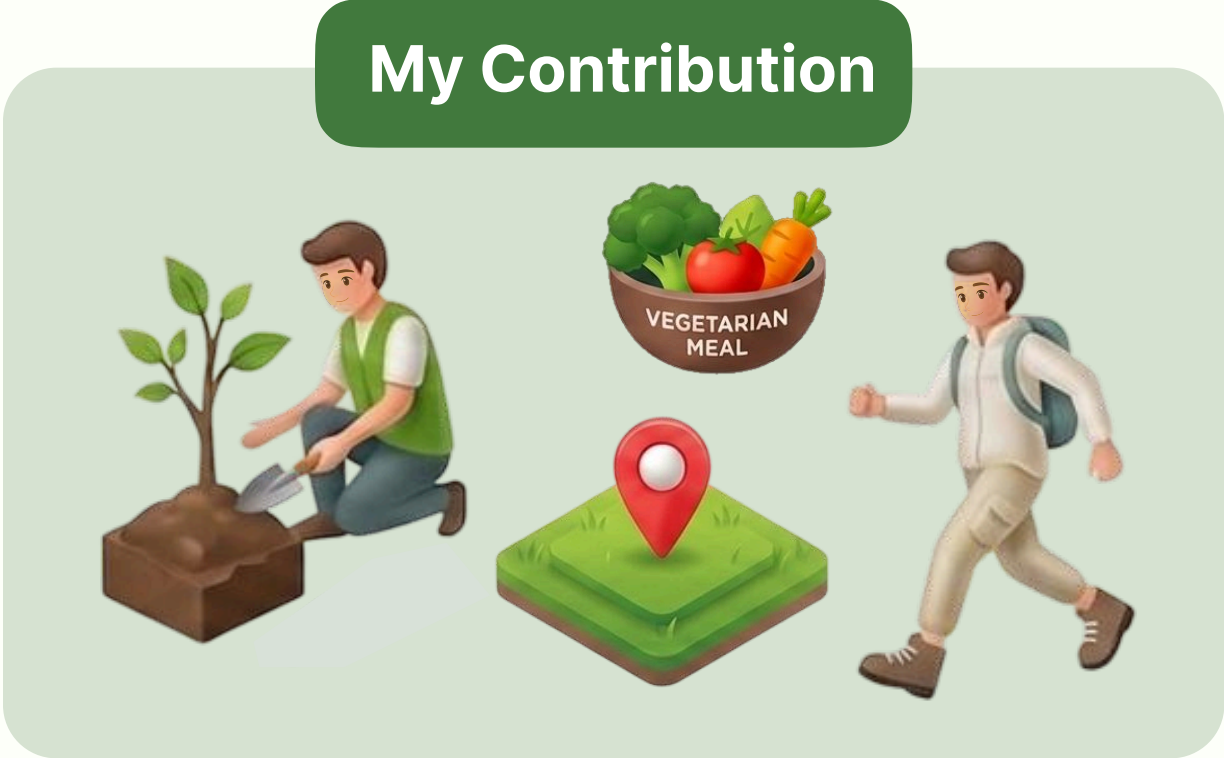
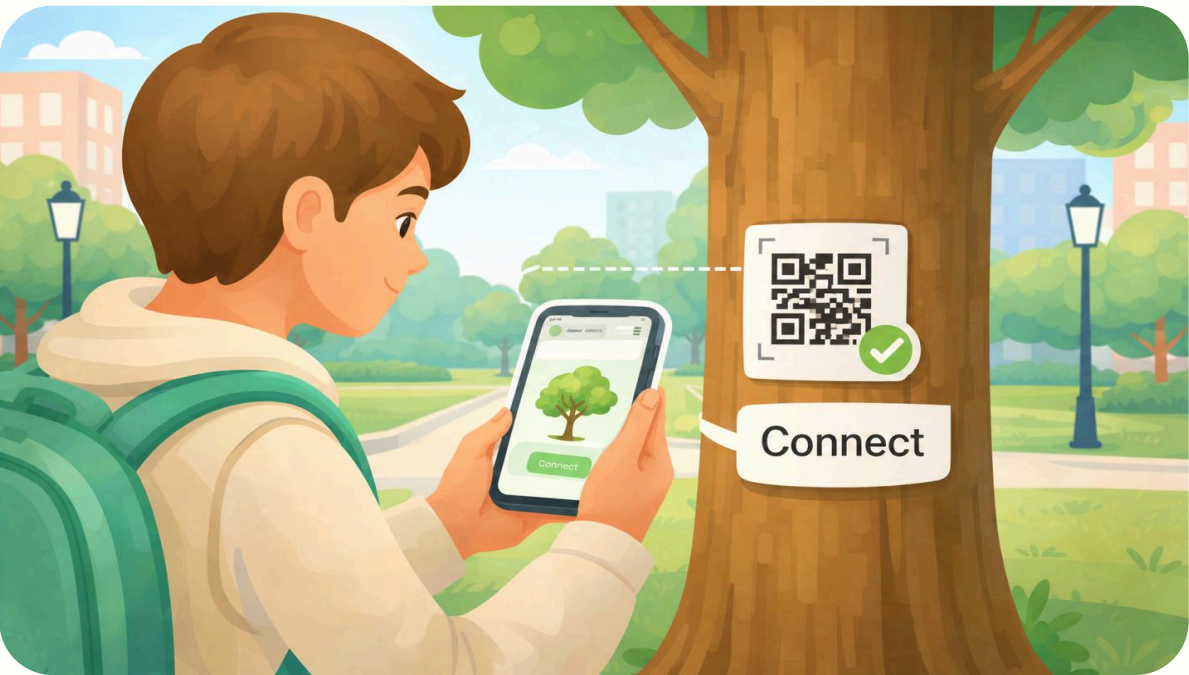
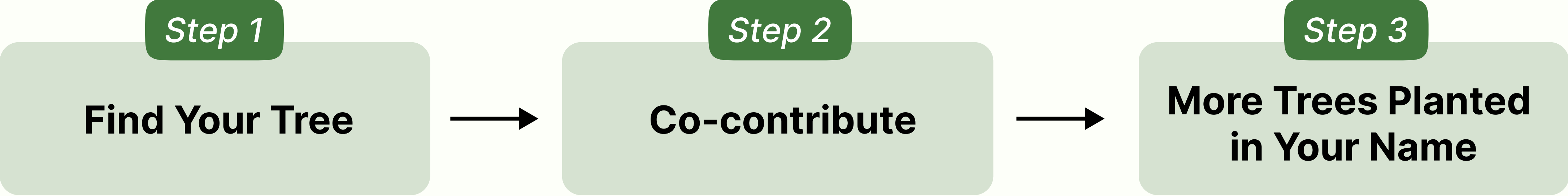
Tree Map



- Spatial
- Community-linked
- Local stories
- Place Identity

F

The Core Loop - Story Line



Transform Invisible Value into Tangible Design

All of the Invisible Parts

Nameless Tree

Relational Wellbeing

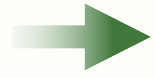
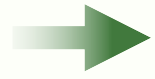
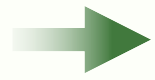
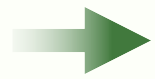
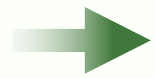
Ecological Identity

Withering

Emotional Wellbeing

Tree Life cycle

Social Identity



Features



Camphor Tree

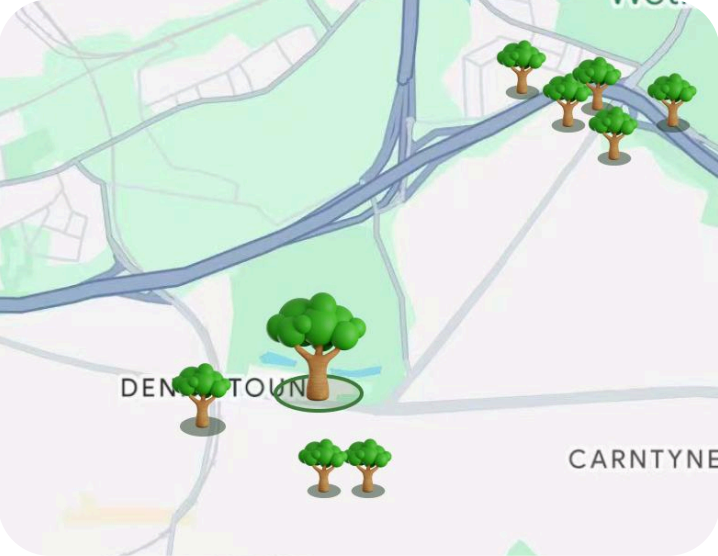
Name **Buddy**

Age **12** years old

Birth **2014**

Base **Calgary St**

Tree Map and Postcards



Volunteer Activities

Apr 19, 2026 50 Pts



🕒 Collect fallen leaf compost for partner tree

Observation Task



Spring



Summer



Autumn



Winter

Features

Ecological Values (/year)



OXYGEN YIELD

1.2kg /daily

Enough for an adult to breathe for 7 days.



CARBON CAPTURE

25kg /yearly

Equivalent to a car driving 100km.

CARBON SEQUESTRATION

60g

~1/2 can of Cola



Write Postcards

2026.04.29 10:00

Me

Dear Tree,



Social Values



HUMAN VALUE

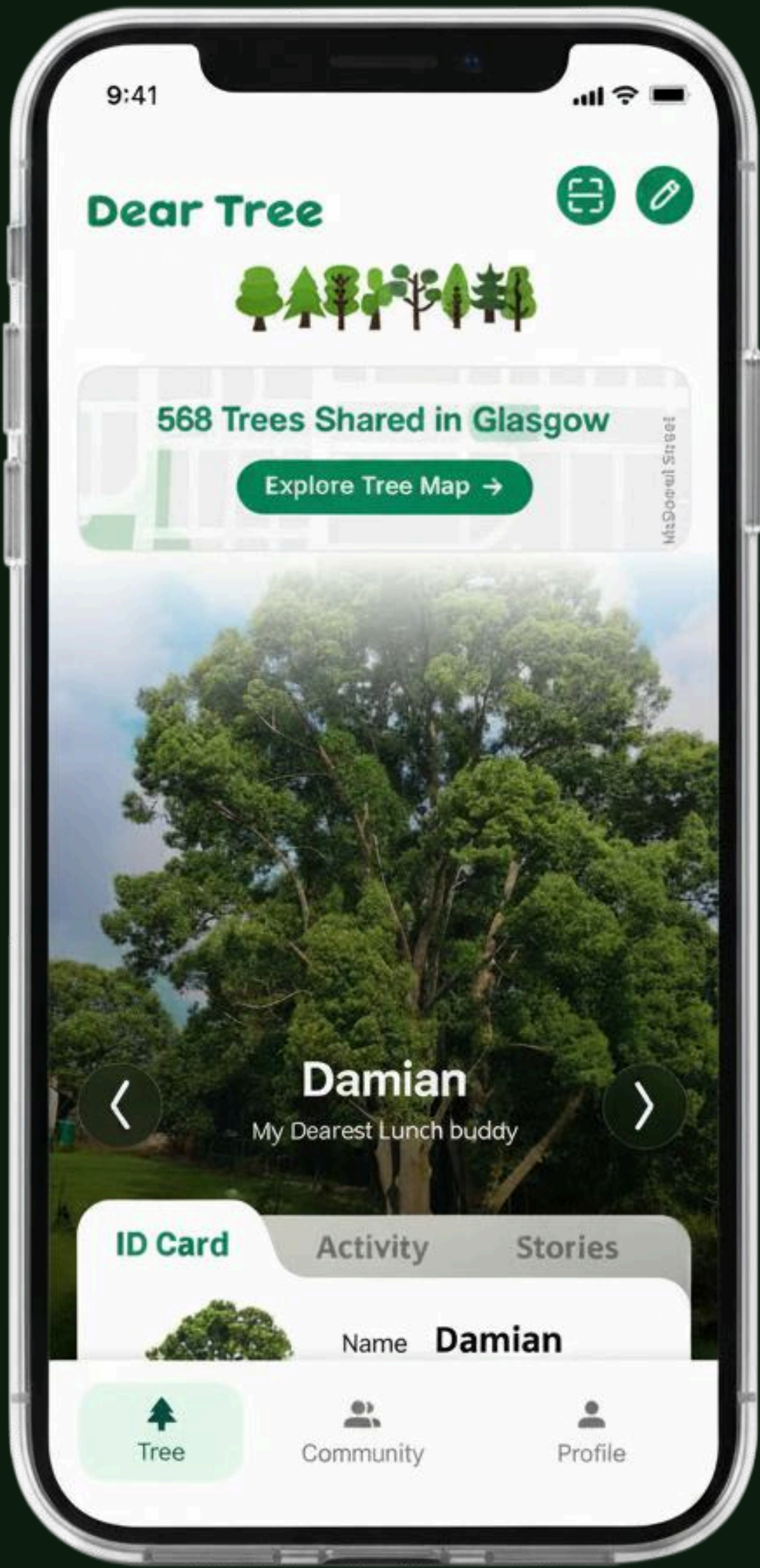
"Witnessed 4 generations of growth on this street, acting as a living bridge between the neighborhood's past and future."



How it works ?



Click to watch the video
<https://youtu.be/8sqbSRH6k3A>



Step 1

Find your dear tree



Step 2

Co-contribute



Step 3

12 Trees Planted
in Your Name

ID Card

Learn

Activity

Do

Story

Feel

OF TREE PLANTING

THIS IS TO CERTIFY THAT

12

trees have been planted

DATE: [YYYY - MM - DD]
ISSUED BY: [ORGANIZATION NAME]



ISSUED BY: [ORGANIZATION NAME]



Future Development



A Letter from the Trees

This letter is a planting certificate, sent after trees are planted.

It tells users: "Because of you, 12 real trees have been planted in Glasgow."

Designed as a handwritten note with real seedling images and the Dear Tree logo — like a personal letter from a tree, not a typical certificate.

We want users to feel connected to the living trees they helped grow.

Later, the letter will show each tree's location and growth. Users can visit them in person and follow their journey.

Limitations & Future Development

- 1. Technical cost:**
One of the rules is Geo-fencing for park and green space recognition which is expensive to implement. Some of the rules for earning points depend on users' self-compliance, without compulsory restrictions.
- 2. Accessibility:**
Needs further iteration to ensure accessibility for diverse users.
- 3. User-test:**
The list of "green behavior" types needs more real-user testing to make rules more executable and easier to follow.
- 4. Digital vs. physical experience:**
Tree images cannot replace the rustling sound, the smell, or the healing effect of hugging a tree.